

IN THE CLAIMS:

Please AMEND claims 1, 3, 4, 8, 13-16, 18, 20-25, 27, 28, 31 and 32 and ADD new claims 33-65 as follows.

1. (Currently Amended) A method, comprising:

monitoring a length of a data queue in a first network element ~~for as~~ an indication of future need of communication resources in the first network element, wherein the indication comprises a coded value of ~~at the~~ length of ~~at the~~ data queue in the first network element, and wherein the length of the data queue is embedded in a data block from the first network element; and

allocating the communications resources for a transmission between the first network element and a second network element based on the indication.

2. (Cancelled)

3. (Currently Amended) The method according to claim 1, wherein the monitoring of the indication further comprises monitoring information about a transmit buffer of the first network element.

4. (Currently Amended) The method according to claim 1, wherein the monitoring of the indication further comprises monitoring information on additional resources needed by said first network element.

5-6. (Cancelled)

7. (Previously Presented) The method according to claim 1, wherein the first network element is a mobile station and the second network element is a base station of a wireless communication network.

8. (Currently Amended) A system, comprising:
a plurality of first stations;
a second station connected to the plurality of first stations through a plurality of communication links; and
a controller configured to control allocation of the communication resources among the communications communication links, wherein the controller being is separate and independent from the first stations, said allocation being is performed in accordance with information transmitted from each of the first stations, and wherein the information from each of the first stations comprises a data block embedding a coded value of a length of a data queue queues in each of the first stations.

9. (Previously Presented) The system according to claim 8, wherein said controller is part of a base station.

10-12. (Cancelled)

13. (Currently Amended) The system according to claim 8, wherein each of said first stations ~~transmits~~ are configured to transmit a transmission comprising a plurality of data blocks, and wherein the coded value of the length of a data ~~queue~~ ~~queue~~ of one of the first stations is provided in each of said data blocks in the transmission associated with said one first station.

14. (Currently Amended) An apparatus, comprising:
a controller configured to control allocation of communication resources for a mobile station, wherein the allocation is based upon queue length information received ~~embedded in a data block~~ from the mobile station ~~that is embedded in a data block.~~

15. (Currently Amended) An apparatus, comprising:
a processor configured to
~~a data queue, configured to store data packets for sending;~~
~~an encoder configured to encode a code representative of a length of the~~
data queue embedded in a data block, and

~~a transmitter configured to transmit said data packets and said data block with said code included thereinin the data block as a field.~~

16. (Currently Amended) The method according to claim 1, wherein the monitoring further comprises receiving data packets and wherein each of the data packets comprises the indication of the length of the data queue.

17. (Cancelled)

18. (Currently Amended) The apparatus according to claim 26, wherein the ~~decoder~~processor is further configured to receives a plurality of data packets and each of said data packets comprises said queue length information.

19. (Previously Presented) The apparatus according to claim 15, wherein said data comprises a plurality of data packets, and wherein each of said data packets comprises said code.

20. (Currently Amended) An apparatus, comprising:
decoder means for decoding a code representative of a length of a data queue in a mobile station, wherein the length of the data queue is embedded in a data block from the mobile station; and

controller means for controlling allocation of communication resources, wherein said decoder means is configured to provides queue length information for the mobile station to the controller means.

21. (Currently Amended) An apparatus, comprising:

data generator means for generating data;

data queue means for receiving data packets from the data generator means;

encoder means for encoding a code representative of a length of the data queue means, wherein the encoder means is configured to embeds the length of the data queue in data block; and

a-transmitter means for transmitting said data packets and said data block, wherein said code is included thereinin the data block as a field.

22. (Currently Amended) A method, comprising:

generating data;

encoding a code representative of a length of a data queue in a first network element, wherein the length of the data queue is embedded in a data block and the data queue is configured to receive the generated data block; and

transmitting data packets comprising a field comprising said code, wherein said code is used when allocating communication resources for a transmission between the first network element and a second network element.

23. (Currently Amended) The method according to claim 22, wherein the encoding of the code further comprises encoding information about a transmit buffer of the first network element.

24. (Currently Amended) The method according to claim 22, ~~wherein in~~ wherein the encoding of the code further comprises encoding information on additional resources needed by said first network element.

25. (Currently Amended) The method according to claim 22, wherein the first network element ~~iscomprises~~ a mobile station and the second network element ~~iscomprises~~ a base station of a wireless communication network.

26. (Previously Presented) The apparatus according to claim 14, further comprising:

a decoder configured to:

decode a code representative of the queue length information for each of the at least one mobile station, and

provide said queue length information for each of the at least one mobile station to the controller.

27. (Currently Amended) The apparatus according to claim 1426, wherein the code comprises information about a transmit buffer for each of the at least one mobile station.

28. (Currently Amended) The apparatus according to claim 1426, wherein the code comprises information on the additional resources needed by each of the at least one mobile station.

29. (Previously Presented) The apparatus according to claim 15, wherein the code further comprises information about a transmit buffer for the apparatus.

30. (Previously Presented) The apparatus according to claim 15, wherein the code further comprises information on additional resources needed by said apparatus.

31. (Currently Amended) A computer program embodied on a computer-readable storage medium, the program configured to control a processor to perform a process, the process having computer executable components comprising: monitoring a length of a data queue in a first network element for as an indication of future need of communication resources in the first network element, wherein the indication comprises a coded value of a length of a data queue in the first network

element, and wherein the length of the data queue is embedded in a data block from the first network element; and

allocating the communications resources for a transmission between the first network element and a second network element based on the indication.

32. (Currently Amended) A computer program embodied on a computer-readable storage medium, the program configured to control a processor to perform a process, the process having computer executable components comprising:

generating data;

encoding a code representative of a length of a data queue in a first network element, wherein the data queue is configured to receive the generated data, and wherein the length of the data queue is embedded in a data block from the first network element; and

transmitting data packets comprising a field comprising said code, wherein said code is used when allocating communication resources for a transmission between the first network element and a second network element.

33. (New) An apparatus, comprising:

a processor configured to

monitor a length of a data queue in a first network element as an indication of future need of communication resources in the first network element, wherein the

indication comprises a coded value of the length of the data queue in the first network element, and wherein the length of the data queue is embedded in a data block from the first network element, and

allocate the communications resources for a transmission between the first network element and the apparatus based on the indication.

34. (New) The apparatus according to claim 33, wherein the processor is further configured to monitor information about a transmit buffer of the first network element.

35. (New) The apparatus according to claim 33, wherein the processor is further configured to monitor information on additional resources needed by said first network element.

36. (New) The apparatus according to claim 33, wherein the first network element comprises a mobile station and the second network element comprises a base station of a wireless communication network.

37. (New) The apparatus according to claim 33, wherein the processor is further configured to perform the monitoring by receiving data packets and wherein each of the data packets comprises the indication of the length of the data queue.

38. (New) An apparatus, comprising:

monitoring means for monitoring a length of a data queue in a first network element as an indication of future need of communication resources in the first network element, wherein the indication comprises a coded value of the length of the data queue in the first network element, and wherein the length of the data queue is embedded in a data block from the first network element, and

allocating means for allocating the communications resources for a transmission between the first network element and the apparatus based on the indication.

39. (New) A method, comprising:

controlling allocation of communication resources for a mobile station, wherein the allocation is based upon queue length information received from the mobile station that is embedded in a data block.

40. (New) The method according to claim 39, further comprising:

decoding, by the controller, a code representative of the queue length information for each of the at least one mobile station; and
providing said queue length information for each of the at least one mobile station to the controller.

41. (New) The method according to claim 40, further comprising:
receiving a plurality of data packets, wherein each of said data packets comprises
said queue length information.

42. (New) The method according to claim 40, wherein the decoding of the
code comprises decoding information about a transmit buffer for each of the at least one
mobile station.

43. (New) The method according to claim 40, wherein the decoding of the
code further comprises decoding information on the additional resources needed by each
of the at least one mobile station.

44. (New) A computer program embodied on a computer-readable storage
medium, the program configured to control a processor to perform a process, the process
comprising:

controlling allocation of communication resources for a mobile station, wherein
the allocation is based upon queue length information received from the mobile station
that is embedded in a data block.

45. (New) An apparatus, comprising:
controlling means for controlling allocation of communication resources for a
mobile station; and
allocating means for performing the allocation based upon queue length
information received from the mobile station that is embedded in a data block.

46. (New) A method, comprising:
encoding a code representative of a length of a data queue embedded in a data
block; and
transmitting said data packets and said data block with said code included in the
data block as a field.

47. (New) The method according to claim 46, wherein said transmitting of said
data packs comprises transmitting a plurality of data packets, and wherein each of said
data packets comprises said code.

48. (New) The method according to claim 46, wherein the encoding of the
code further comprises encoding information about a transmit buffer for the first network
element.

49. (New) The method according to claim 46, wherein the encoding of the code further comprises encoding information on additional resources needed by said first network element.

50. (New) A computer program embodied on a computer-readable storage medium, the program configured to control a processor to perform a process, the process comprising:

encoding a code representative of a length of a data queue embedded in a data block; and

transmitting said data packets and said data block with said code included in the data block as a field.

51. (New) An apparatus, comprising:

encoding means for encoding a code representative of a length of a data queue embedded in a data block; and

transmitting means for transmitting said data packets and said data block with said code included in the data block as a field.

52. (New) An apparatus, comprising:

a processor configured to

generate data,

encode a code representative of a length of a data queue in the apparatus, wherein the length of the data queue is embedded in a data block and the data queue is configured to receive the generated data block, and

transmit data packets comprising a field comprising said code, wherein said code is used when allocating communication resources for a transmission between the apparatus and another network element.

53. (New) The apparatus according to claim 52, wherein the code further comprises information about a transmit buffer of the apparatus.

54. (New) The apparatus according to claim 52, wherein the code further comprises information on additional resources needed by the apparatus.

55. (New) The apparatus according to claim 52, wherein the apparatus comprises a mobile station and the another network element comprises a base station of a wireless communication network.

56. (New) A computer program embodied on a computer-readable storage medium, the program configured to control a processor to perform a process, the process comprising:

generating data;

encoding a code representative of a length of a data queue in a first network element, wherein the length of the data queue is embedded in a data block and the data queue is configured to receive the generated data block; and
transmitting data packets comprising a field comprising said code, wherein said code is used when allocating communication resources for a transmission between the first network element and a second network element.

57. (New) An apparatus, comprising:
data generating means for generating data;
encoding means for encoding a code representative of a length of a data queue in the apparatus, wherein the length of the data queue is embedded in a data block and the data queue is configured to receive the generated data block; and
transmitting means for transmitting data packets comprising a field comprising said code, wherein
said code is used when allocating communication resources for a transmission between the apparatus and another network element.

58. (New) The method of claim 1, wherein the monitoring further comprises monitoring a countdown value of the data block for an indication of the length of the data queue.

59. (New) The apparatus of claim 14, wherein the controller is configured to perform the allocation based on queue length information included in a countdown value of the data block.

60. (New) The apparatus of claim 15, wherein the processor is configured to include the code representative of the queue length in a countdown value of the data block.

61. (New) The method of claim 22, wherein the encoding further comprises encoding the code representative of the length of the data queue in a countdown value of the data block.

62. (New) The apparatus of claim 33, wherein the processor is configured to monitor a countdown value of the data block for an indication of the length of the data queue.

63. (New) The method of claim 39, wherein the controlling further comprises performing the allocation based on queue length information included in a countdown value of the data block.

64. (New) The method of claim 46, wherein the encoding further comprises including the code representative of the queue length in a countdown value of the data block.

65. (New) The apparatus of claim 52, wherein the processor is configured to encode the code representative of the length of the data queue in a countdown value of the data block.